

### APPENDIX 3

1/5/2 (Item 1 from file: 347)  
DIALOG(R) File 347:JAPIO  
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06943097 \*\*Image available\*\*  
CHITOSAN ELUTING UTENSIL

PUB. NO.: 2001-170648 A]  
PUBLISHED: June 26, 2001 (20010626)  
INVENTOR(s): JA YAN KOO  
JONKU DYUKU CHOI  
SON SHIK KIM  
SUU YON RII  
JON SAN PAKU  
APPLICANT(s): SAEHAN IND INC  
APPL. NO.: 11-354796 [JP 99354796]  
FILED: December 14, 1999 (19991214)  
INTL CLASS: C02F-001/50; B01D-061/02; B01D-061/14; C02F-001/68

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a chitosan eluting utensil capable of slowly eluting chitosan into drinking water for the suppression of microorganism growth or the anti bacteria.

SOLUTION: The bag like or cylindrical chitosan eluting utensil houses solid chitosan or a chitosan solution inside. The chitosan eluting utensil is composed of a porous membrane having a pore diameter enough to release chitosan molecule.

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1/5/3 (Item 1 from file: 351)  
DIALOG(R) File 351:Derwent WPI  
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014008006 \*\*Image available\*\*  
WPI Acc No: 2001-492220/#200154#

XRAM Acc No: C01-148272

Chitosan elution device for sterilizing potable water, is of bag-like or cylindrical shape and consists of chitosan packed in porous film, through which it is eluted

Patent Assignee: SAEHAN IND CO LTD (SAEH-N); SAEHAN IND INC (SAEH-N)

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001170648	A	2001.06.26	JP 99354796	A	1999.12.14	200154 B
CN 1301670	A	2001.07.04	CN 99125638	A	1999.12.28	200161 N

Priority Applications (No Type Date): JP 99354796 A 19991214; CN 99125638 A 19991228

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2001170648	A	5	C02F-001/50	
CN 1301670	A		C02F-001/68	

Abstract (Basic): #JP 2001170648# A

NOVELTY - The chitosan elution device consists of a cylindrical or bag-shaped porous film containing chitosan (4), whose elution is carried out externally through the film.

DETAILED DESCRIPTION - The porous film is selected from nano membrane filter, ultrafiltration membrane or a micro membrane filter.

USE - For sterilizing and suppressing growth of bacteria in potable water.

ADVANTAGE - The chitosan elution device can be used in the filter system for drinking water supply. Chitosan imparts beneficial biological effect to human body, when ingested together with water and at the same time inhibits proliferation of microbes. The growth of bacteria in potable water is suppressed.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective diagram of the cylindrical chitosan elution device.

Chitosan (4)  
pp; 5 DwgNo 1/3

Title Terms: CHITOSAN; ELUTION; DEVICE; POTABLE; WATER; BAG; CYLINDER; SHAPE; CONSIST; CHITOSAN; PACK; POROUS; FILM; THROUGH; ELUTION

Derwent Class: D15

International Patent Class (Main): C02F-001/50; C02F-001/68

International Patent Class (Additional): B01D-061/02; B01D-061/14

File Segment: CPI

1/5/4 (Item 1 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

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135050813 CA: 135(4)50813u PATENT

Device for chitosan elution into drinking water

INVENTOR(AUTHOR): Ko, Jang Yan; Choi, Jong Dok; Kim, Son Shik; Lee, Sue Yong; Park, Jong Sung

LOCATION: S. Korea

ASSIGNEE: Saehan Industries Inc.

PATENT: Japan Kokai Tokkyo Koho ; JP 2001170648 A2 DATE: 20010626

APPLICATION: JP 99354796 (19991214)

PAGES: 5 pp. CODEN: JKXXAF LANGUAGE: Japanese CLASS: C02F-001/50A; C02F-001/50B; B01D-061/02B; B01D-061/14B; C02F-001/68B

SECTION:

CA261005 Water

IDENTIFIERS: chitosan elution water drinking purifn

DESCRIPTORS:

Water purification...

app.; device for chitosan elution into drinking water

Bacillus subtilis... Bags... Drinking waters... Escherichia coli...

Membranes,nonbiological... Water purification...

device for chitosan elution into drinking water

Water purification...

disinfection; device for chitosan elution into drinking water

Acids,uses...

org.; device for chitosan elution into drinking water

CAS REGISTRY NUMBERS:

9012-76-4 device for chitosan elution into drinking water

110-15-6 uses, device for chitosan elution into drinking water